

Force Health Protection Future Capability (FHPFC)

**Casualty Care and Management, Casualty Prevention
and Healthy and Fit Force**

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Force Health Protection Future Capability (FHPFC)

Address medical support requirements essential for sustaining *Sea Warrior*. Provide technologies that allow effective treatment of casualties in the *far forward battlespace*, prevent casualties from hostile, environmental, and operational factors, and provide a healthy and fit force ready for any operational contingency.



Force Health Protection Future Capability (FHPFC)

Casualty Care and Management



Casualty Prevention



Healthy and Fit Force



Value of FHPFC Products

- FHPFC technologies save lives – example QuikClot:
 - Credited with saving at numerous lives in OIF
 - Stops uncontrolled bleeding
 - Cost per package < \$10.00
 - Individual carry
- FHPFC investments will deliver technologies that:
 - Improve self aid/buddy aid techniques
 - Enable injured Warfighters to remain tactical while awaiting evacuation
 - Improve medical self reliance of maneuver units to stabilize casualties and prepare for transport
 - Enhance transport of unstable casualties over long distances (200NM)
 - Conserve fighting strength by reducing disease/non-battle injury and injury from novel threats



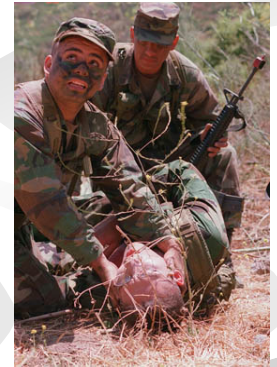
Comparison of Statistics for Battle Casualties, 1941-2005

	World War II	Vietnam War	Iraq & Afghanistan
%KIA	23.7%	21.3%	12.5%
%DOW	3.4%	3.5%	4.1%
%CFR	22.8%	16.5%	8.8%



Casualty Care and Management

- Hemostatic Agents
- Analgesia without Performance Deficit
- Therapeutics for Shock
- Patient Monitoring Devices
- Oxygen Delivery Devices
- Resuscitation Devices



Maximize the continuum of care with lifesaving interventions as far forward as possible in an increasingly lethal battlespace with reduced infrastructure and logistics.





Anatomical Location of Injury

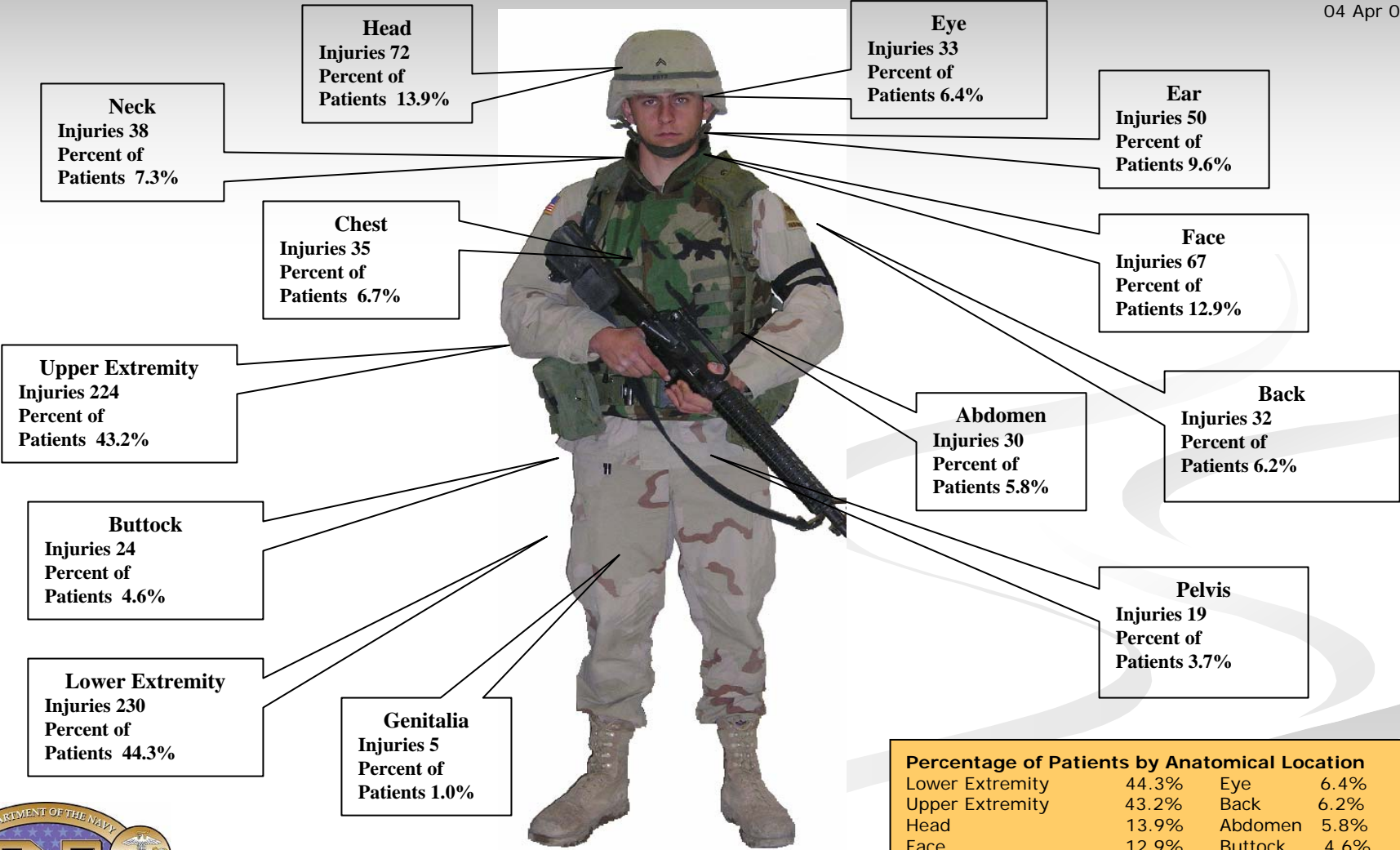
Naval Health Research Center

Sponsored by the Office of Naval Research
Marine Corps Systems Command and
Marine Corps Warfighting Lab

**US Navy, Marine Corps and
Army - WIA only**
Sample from April-November 2004

Total Patients 519 / Total Injuries 859

04 Apr 05



Percentage of Patients by Anatomical Location			
Lower Extremity	44.3%	Eye	6.4%
Upper Extremity	43.2%	Back	6.2%
Head	13.9%	Abdomen	5.8%
Face	12.9%	Buttock	4.6%
Ear	9.6%	Pelvis	3.7%
Neck	7.3%	Genitalia	1.0%
Chest	6.7%		



Business Opportunities

Next Generation FHPFC

Casualty Care and Management

- Hemorrhage Control – Internal Injuries
- Blood Transfusion Safety
- Closed Loop Medical Devices
- Treatment of Blast Injuries
- Non-Cryogenic Metabolic Downregulation
- Novel Antibiotics



Casualty Prevention

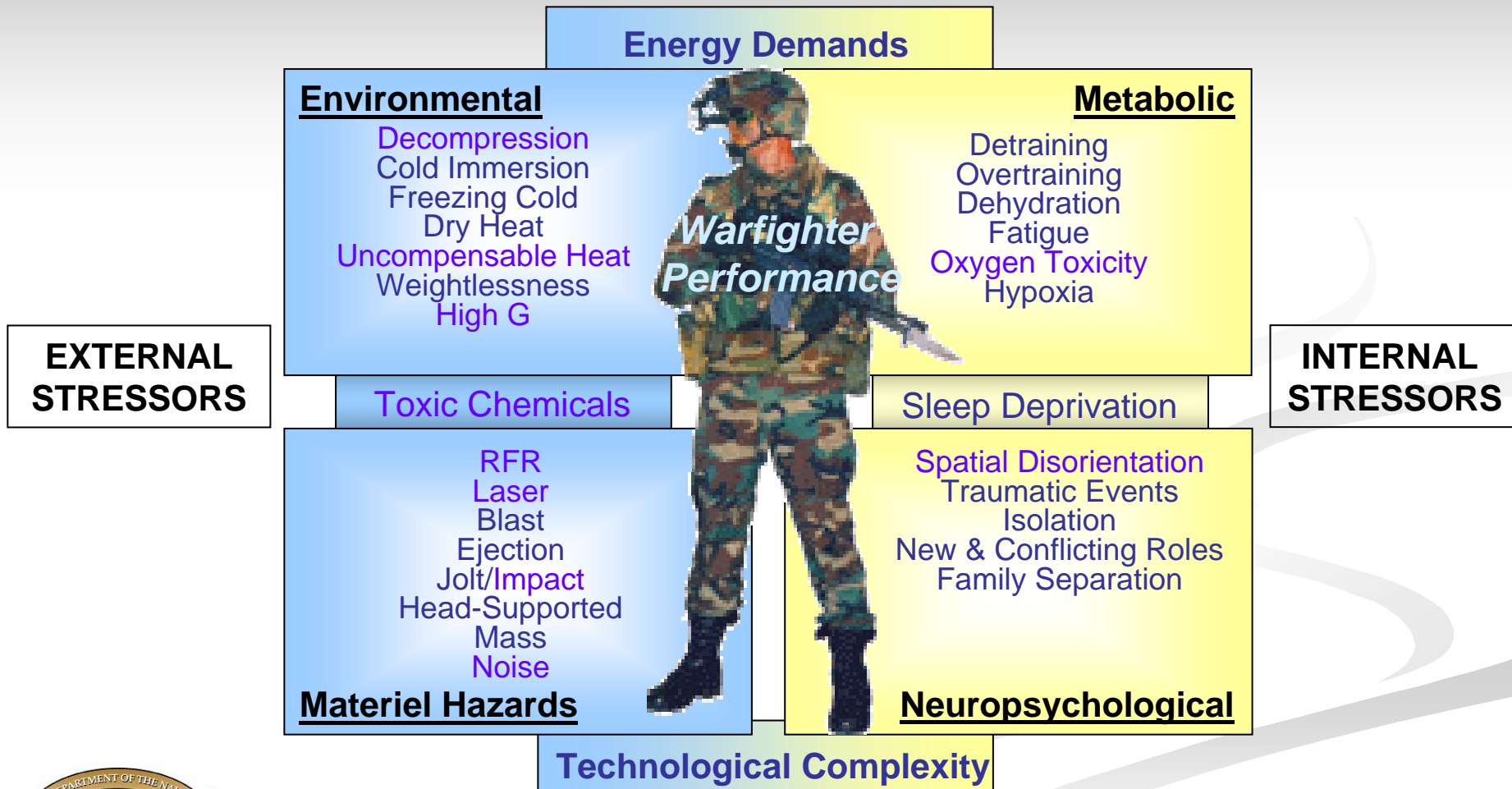
- Diver Environmental Protection
- Prevention of Shock-Induced Injury in Naval Vessels
- Neurological Effects of Blast
- Medical Assessment of Thermobaric Casualties
- Standards for Behind Armor Blunt Trauma
- Prevention of Aviation Mishaps
- Criteria for RTD of Heat Casualties
- Noninvasive Diagnostic Tests for Diseases
- Decision Support Tool for Modeling/Predicting DNBI
- Head-Mounted Hearing Protection



Enhance Warfighter situation awareness and counter threats from disease, battle and non-battle injuries.

Force Health Protection Future Capability (FHPFC)

Operational Stressors



Healthy and Fit Force

- Pharmacologic Treatments for Preventing or Reversing Hearing Loss
- Treatments for PTSD and Combat Stress
- Prevention of Neck and Spine Injury



Preserve health and enhance fitness of ready forces against physical and psychological threats through the continuum of peace and war.



Business Opportunities

Next Generation FHPFC

Casualty Prevention and Healthy and Fit Force

Potential Next Steps

- Improved Body Armor
- Advanced Environmental Protection
- Stress Inoculation
- Extremity Protection
- Prevention of Musculoskeletal Injury



FHPFC Contact Information

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